WE CLAIM AS OUR INVENTION:

1. A sealed component for a magnetic resonance imaging scanner comprising:

cured sealing compound carrying at least one RF coil and at least one gradient coil for magnetic resonance imaging; and

an actuator module comprising an actuator for active noise control during said magnetic resonance imaging, said actuator having opposite ends, two holding elements respectively rigidly fastened to the opposite ends of the actuator, two actuator receiving elements respectively fastened to the two holding segments, said two actuator receiving elements being embedded in the cured sealing compound with a spacing between said two receiving elements, and each of said two receiving elements having a fastening segment that protrudes into a recess in the sealing compound.

2. A sealed component as claimed in claim 1 wherein said two holding segments are respectively screwed onto said two receiving elements.

3. A sealed component as claimed in claim 2 wherein each of said receiving elements comprises a perforated anchoring plate region connected to the fastening segment, the fastening being thicker than said plate region and said fastening segments having threaded bores therein for respectively receiving screws for fastening to one of said holding segments.

4. A method for manufacturing a sealed component for a magnetic resonance imaging scanner, comprising the steps of:

providing an actuator module comprising an actuator for active noise control during magnetic resonance imaging with holding segments rigidly

fastened respectively to opposite ends of the actuator, said actuator having a base region;

providing two actuator receiving elements each having a fastening surface and threaded holes adapted to receive screws for fastening one of said holding segments thereto;

pouring sealing compound for sealing at least one of a radio-frequency coil and a gradient coil for use in said magnetic resonance imaging, and during pouring of said sealing compound, holding said actuator receiving elements in a predetermined installation position with an installation template removably engaging the two actuator receiving elements and projecting from said sealing compound, and covering the respective fastening surfaces and threaded holes of the two actuator receiving elements so that said fastening surfaces and threaded holes are not wetted by the sealing compound; and

after pouring said sealing compound, uncovering said fastening surfaces and threaded holes and screwing the respective holding segments to the two actuator receiving elements.

5. A method as claimed in claim 4 comprising providing said installation template with a plurality of spacing pins seated on the respective fastening segments of the actuator receiving elements, and providing an elastic sealing plate between the actuator receiving elements and the template into which the pins penetrate, said elastic sealing plate having a thickness exceeding a length of the spacing pins, and engaging the installation template with the actuator receiving elements by tightening screws proceeding through said installation template and into the respective actuator

receiving elements until the pins respectively contact the actuator receiving elements.

6. A method as claimed in claim 5 comprising providing said installation template with a surface profile adapted to receive a withdrawal tool for withdrawing the installation template from the sealing compound.

7. A method as claimed in claim 6 comprising providing said installation template with threaded bores as said surface profile.

8. A method as claimed in claim 6 comprising covering said installation plate with a removable protective plate that prevents wetting of said surface profiles by said sealing compound.

9. A method as claimed in claim 8 comprising providing said protective plate with sealing plugs that engage said surface profiles with a press fit.